the genius of their Age, fight about the *Manna.* Near them are *Men*, gathering *Manna* in the mean time, and eating thereof. A little farther off, appears a *Girle*, who unwilling to take the pains of ſtooping, holds out her coat to receive the *Manna* falling down, and looks on it, as if the Heavens dropp'd it for none but her: Which well expreſſeth (ſays the Obſerver) the Softneſs and diſdainful Temper of that Sexe, which loves not to take pains, and imagines that all muſt come to paſs, as they wiſh. In the other piece, which exhibits the Recovery of the *Two Blind* men, to whom our Saviour reſtored their Sight, there is an *Old* man, who comes very near, peeping, and looking as if he doubted of the truth of the Miracle: in which the Artiſt hath well obſerv'd the genius of Aged perſons, who commonly are more incredulous and diffident than others.

Beſides this, there are examin'd here and there in theſe Conferences divers Queſtions important in Painting; which would be too long to particulariſe in this place.

An Account of ſome Books.

INSTITUTIONUM CHRONOLOGICARUM Libri duo; una cum totidem ARITHMETICES CHRONOLOGICÆ Libellis: per Gulielm. Beveregium *M. A. è Colleg. S. Joh. Cant.* Londini 1669. *in* 4°.

THis Author firſt taketh notice, that though moſt Nations have been diligently endeavoring to render a good account of *Time* (having its Original and Progreſs from the Motions of the Heavens) yet caſting his Eyes upon ſome of the moſt famous Chronologers, as *Scaliger*, *Petavius*, *&c.* he found *Chronology* obſcur'd with many intricate Queſtions, fill'd with many knotty Controverſies, ſtuffed with a multitude of uncertain Comments, and deliver'd in ſuch an odd and dark method, that the knowledg thereof was not to be obtain'd without much difficulty, and loſs of Time. Whereupon he declareth his Deſign to be, To deliver the ſame from Controverſy, and only to treat of what concerns meerly the Diſtinction of Time, omitting matters of leſs concernment, and yet nothing of what may be requiſite to *Chronology* it ſelf; in which he *(truly)* aſſerts, That many things, moſt worthy to be known, may be found, for which you may look in vain elſewhere.

And what he performes herein, he doth in a Method different from others, *viz.* meerly by *Arithmetick*, without the aid of *Chronological Tables*; which, even of the beſt Authors, will hardly be found without manifold faults.

In the *firſt* Book he treats of *Time* in *general*; of a Moment, (*de Scrupulo*;) an Hour, a Day, Week, Month: And then of the ſeveral ſorts of Years, the *Celeſtial*, *Iulian*, *Gregorian*, *Ægyptian*, *Æthiopick*, *Perſian*, *Syriack* and *Grecian*; item, the *Aſtronomical*, *Civil*, and *Solar* Year of the Iews, and the *Arabick* year.

In the *ſecond*, the Author (ſhewing good skill in Aſtronomy) treats of *Conjunctions*, and *Eclipſes*, of the *Æquinoxes* and *Solſtices*, the *Circle of the Sun*, and the *Dominical Letter*; the *Circle of the Moon* or the Golden number, the *Roman Indiction*, and *Epacts*; of ſeveral eminent Periods or Revolutions of Time, as the *Metonick*, *Calippick*, the *Dionyſian* and Iulian Period; of ſeveral *Æra's* or fixed Characters of Time, as the *Chriſtian* and *Diocleſian*; of the Age of the World according to the Accompt of the *Græcians*: Moreover of the *Iewiſh Æra*; The Æra or *Ethnick* Accompt from the taking of *Troy*; and the *Antiochenian Epocha*: the *Olympiads*, and *Agones Capitolini*: Of the *Iulian* year, the *Spaniſh Æra*; the *Æra* of the Victory at Actium; the *Epocha* of *Nabonaſſar*; as alſo of the Philippean, Alexandrian, and the Yezdegirdican Epocha; and of the *Mahumetan Æra*, the *Hegira*, or Flight of Mahomet.

In the *Arithmetical* Part, the Author ſhews not only his great skill in *Arithmetick*, even in the Speculative parts thereof, accompanied with good knowledge in the Grounds of *Geometry* but likewiſe his underſtanding of Exotick and Ancient Languages; and, as a Specimen thereof, explains the Common Characters of Arithmetick, as he doth alſo the *Indian*, *Roman*, *Hebrew*, *Samaritan*, *Græcian*, *Syriac*, *Arabick* and *Æthiopick* Characters. And to the End of the *ſecond* Book he hath annexed an *Appendix*, wherein, in *Roman* Letters, he hath explained the *Hebrew*, *Syriack*, *Perſian*, *Æthiopick* and *Arabick* Words for the reſpective Months of the Year, for the ayde of thoſe, that are not ſo much exerciſed in the *Oriental* Languages.

And the Author, finiſhing this Book in the Year 1667, ſheweth (as a general Example of all his Calculations) in what Yea of all the ſeverall *Periods*, *Æra's*, *Epocha's* and *Accompts* before mention'd, the *Year* of our *Lord Chriſt* did then happen.

But this is not all, that is to be expected from this Author; ſince himſelf intimates pag. 179. *Sed manum de Tabula; de his enim aliiſque, quæ ad Annos præſertim Menſeſque Orientales pertinent, alibi, Deo volente, fuſius agemus:* Which doubtleſs to the Learned (conſidering what is already publiſh'd by him) will be very acceptable.

II. ELEMENTS *of* SPEECH: *An Eſſay of Inquiry into the Natural Production of Letters; together with an* Appendix *to inſtruct Perſons Deaf and Dumb: By* William Holder D.D. *and Fellow of the* R. Society. London, *by* John Martyn, 1669, *in* Octavo.

TO give the Reader the ſumme of what is ſaid in this well conſidered and uſeful Tract, it is as follows;

Language is a Connexion of Audible Signs, the moſt apt and excellent in whole Nature, for Communication of our Thoughts and Notions, by Speaking. *Written Language* is a Deſcription of the ſaid Audible Signs, by Signs Viſible. The *Elements* of Language are *Letters*, *viz.* Simple Diſcriminations of Breath or Voice, Articulated by the Organs of Speech.

The *Alphabet* conſiſts of ſo many Letters, as there are to be found ſuch Simple Diſcriminations. And the *Written Alphabet* ought to be juſt ſo many ſingle proper Characters, deſign'd to ſignifie the Sound or Power of each Letter. And theſe are the Storehouſe of Nature, the Elements and Materials, out of which all Languages are made. Theſe Letters have their *Material* and their *Formal* Cauſes, and *Organs* proper to each. Their *Matter* is various, *viz.* Breath or Voice, *i. e.* Breath vocalized by the Operation of the *Larynx*. Their *Form* is conſtituted by the Motions and Figures of the Organs of Speech, affecting the Breath or Voice with a peculiar Sound, by which each Letter is diſcriminated.

Now to find out their juſt Number, *Firſt*, Find out the different Kinds of Matter, of which Letters are made; and theſe are in general, *Breath*, when only Spirit or Breath is articulated; and *Voice*, when Articulation is of Breath vocalized: And theſe again, more particularly, are either (after they have paſſed the *Larynx*) only in the *Mouth*; or elſe have paſſage at the ſame time through the *Noſe*. So there are four Kinds of *Matter*, Breath Oral, Voice Oral, Breath Ore-Naſal, and Voice Ore-Naſal.

Next, 'Tis to be examin'd, How many different *Articulations* can be made by ſeveral Motions and Poſtures of the Organs in the Parts of the Mouth; which applied ſeverally to the Kinds of Matter, may make ſeveral Diſcriminations of Sound to the Ear, *i. e.* ſeveral Letters. And of theſe (as to *Conſonants*, *viz.* Letters made by Appulſe) our Author finds, and hath deſcribed 9. And if poſſibly any more may be found out, he judges it to be moſt likely, that they will not recompence the Diſcoverers pains, by being of ready and graceful uſe, but will be fitter to be caſt out among ſeveral others; to which in his Scheme of Conſonants he hath prefix'd an *Obelisk*.

Now by theſe 9 Articulations with Appulſe, there will be fram'd Conſonants *Spirital* 9; *Vocal* 9; *Naſo-ſpirital* 9; *Naſo-vocal* 9; in all 36. Then rejecting thoſe, that prove not graceful; nor eaſie to be pronounced; *viz.* 2 Spiritals, 2 Naſo-ſpiritals, and 6 Naſo-vocals, in all 17; there will remain 19 Conſonants proper for uſe, according to the deſign of Letters. And if thoſe, to whom theſe 19 Conſonants (or about that number) appear'd and ſtood in ſuch confus'd Order, ſome in Ternaries, ſome in Pairs, and ſome Single, were themſelves put into ſo much Confuſion, and ſo puzzled to give a Methodical and Natural Accompt of them, it is no matter of wonder. But now, looking upon them, as they lie in their Original *Differences* and *Combinations*, and as they are ſelected out of a Natural Stock of 9 Quaternions, or 4 Novenaries, 'tis judged, that their Nature and Differences lie moſt plain and obvious to be underſtood.

That which renders this Piece the more commmendable, is its *Uſefulneſs*, to which the Author hath excellently applied his Conſiderations of this Subject; viz. *The inſtructing of Perſons Deaf and Dumb.* In the performance of which, he hath firſt removed the great Objections and Difficulties that lie in the way, and ſeem to diſcourage that Deſign, and to portend it infeſible. Which done, he delivers thoſe particulars, that give encouragement to that Undertaking; which he doth from his own practice therein; it being certain, that ſuch a Work as this, is not to be perfected by Study alone, but muſt and will receive many hints and helps (not to be thought on otherwiſe) whilſt the Endeavour is excited, being under Experiment and Practice.

III. GUAGING PROMOTED, *Being an* Appendix to Stereomatical Propoſitions, *formerly publiſhed by* Rob. Anderſon. *Printed for* Joſh. Coniers 1669. *in* Octavo.

IN this ſmall Tract the Author reduceth his former Doctrine of *Gauging* to farther Practice, and illuſtrateth the ſame by Examples.

And firſt he ſuppoſeth the *Axis* of a *Pyramid*, *Cone*, *Sphere*, *Parabolical*, and *Hyperbolical Conoid*, and of a Figure of different *Baſes*, which he calls a *Fruſtrum* of a *Priſme*, which if round, may reſemble a Drinking Cup like an Horn, having its top ſqueezed into an *Elliptick* form, and the bottom remaining either a Circle, or be likewiſe compreſs'd; the ſaid *Axis* to be divided into equal Segments, and Plains paſſing through thoſe Segments erect to the *Axis*; to divide the above-mention'd Solids into divers Portions or Rings: and upon theſe Foundations, *viz.* That in the *Parabolical Conoid* the *ſecond* differences of the Solid Contents of the whole Figures ſo divided are equal; but in the reſt of theſe Solids their *third* Differences are equal: he hath ſuted his Examples to the *Axes* cut by the ſaid Plains at 3 Inches diſtance from each other, ſhewing firſt the nature of the differences in hand, and then ſome eaſie wayes to attain a firſt, ſecond, and third difference; and how out of them to compute the ſeveral Capacities ſought by Additions of Differences plac'd in ſeveral Columns. Laſtly, He gives directions for the more eaſie Calculation of the ſecond Segments of the *Sphere* and *Spheroid*.

But we muſt not omit to take notice, that this Author, ſpeaking *pag.* 23. of ſuch Elliptick Solids, whoſe *Baſes* are unlike, aſſerts, That every ſuch *Elliptick Solid* is equal to the *Fruſtrum* or *Truncus* of an *Hyperbolick Conoid*, the Circular *Baſes* whereof are equal to the *Elliptick Baſes* of the Solid propos'd; and the Height of the one *Fruſtrum* equal to the Height of the other: the Invention and Demonſtration whereof argues good Knowledge in Geometry.

ERRAT. in N°. 46.

P. 928. l. 1. r. *punctum* D *in* B, *ib.* l. 28. r. *fortiſſime omnium aget.*

L O N D O N,
Printed by *T. N.* for *John Martyn* Printer to the *Royal Society*, and
are to be ſold at the *Bell* a little without *Temple-Bar*, 1669.